# NJM aritime Resources

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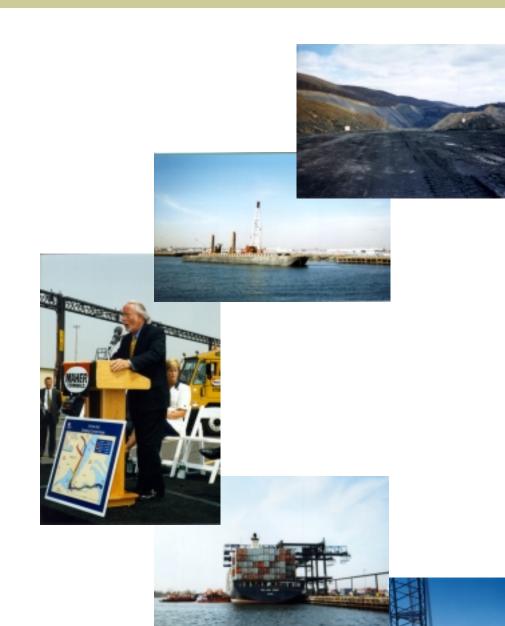
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# A Letter from the Executive Director

1999 has been an extremely challenging but productive year for the crew at New Jersey Maritime Resources. While we generally tend to focus on "big boats", this year we participated in the christening of two very small boats that will go a long way toward keeping Newark Bay and its environs free from floatables while testing and identifying their sources. A small investment toward resolution of a significant problem.

In the meantime, negotiations were concluded with two of the world's largest container carriers, Sea-Land Services, Inc. and Maersk. The companies signed a lease with the Port Authority of New York and new Jersey which is currently pending ratification by the Commissioners. Coincidentally, Maersk purchased Sea-Land's international operations resulting in a single carrier with many Sea-Land jobs returning to New Jersey and Maersk remaining at its Madison Headquarters.

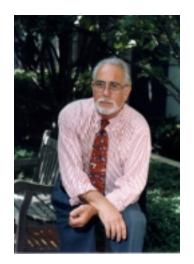
Thirty years ago a study was initiated to determine the appropriate depths for the Kill Van Kull, the narrow waterway between Upper New York Bay and the marine terminals at Port Newark, ElizabethPort and Howland Hook. This year saw the commencement of phase II, construction to -45 feet mean low water (mlw). The initiation of this historic event was presided over by Governor Whitman.

In September, the Governor signed into law a package of bills which would appropriate more than \$157 million for technology development, dredging projects and disposal operations. To anyone's knowledge, it was the largest single investment in maintenance of our navigation channels in the history of the State. But money and dredging projects alone are insufficient. Probably the most significant accomplishment of 1999 was the completion of several studies designed to ensure that the Port of New York and New Jersey remains the premier Atlantic Coast port, ready to meet the future.

We also continued to serve our Delaware River Ports and worked hard to get funding for the local share of the Delaware River Deepening Project through the Legislature. Additionally, we continue to work with the Delaware River Port Authority on public education for this project and with local officials, public interest groups, and the US Army Corps of Engineers to ensure that the project is implemented in an environmentally sensitive and economically effective manner.

The list of projects is almost endless, from dredging projects which exceed \$1 billion to small beneficial use projects in Burlington and Ocean County. New Jersey's Marine Transportation System, with more than 116 State navigation channels and 500 miles of Federal navigation channels requires full-time attention and the continuing support of the public, the Legislature, and our fellow agencies.

Sincerely,



Frank M. M. dDonough Executive Director

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Frank M. McDonough Executive Director

### New Jersey's Marine Transportation System

The Marine Transportation System in the United States consists of waterways, ports and their intermodal connections, vessels, vehicles and system users. Each component is, in itself, a complex system dosely linked with the remaining components. Traditionally, the system has been the world's most technologically advanced, economically efficient and environmentally protective method for moving goods and people. Nowhere is this more true than in New Jersey, one of the original maritime states.

While the New Jersey Department of Transportation (NJDOT) has been responsible for infrastructure maintenance for "planes, trains and automobiles", the Marine Transportation System was relegated to a number of separate agencies and authorities. With reduced funding, competing priorities, and other external influences, the necessity to consolidate management of our entire transportation system as efficiently as possible compelled the transfer of New Jersey Maritime Resources (NJMR) into the New Jersey Department of Transportation. On October 1999, Governor Christine Todd Whitman effectuated the reorganization and the Maritime crew now falls under the Chief of Staff in the Department of Transportation organization chart.



GovernorChristineToddWhitman attheKillVanKullPressEvent

atthe KillVan KullPress Event

#### Highlights from 1999

- Battleship New Jersey Arrives in New Jersey Waters on November 10, 1999.
- Global Terminal and Container Services, Inc. Takes Deliver of Four 50-ton Post-panamax Cranes.
- Governor and Passaic Valley Sewerage Commissioners Launch Harbor Skimmer.
- Governor Signs \$157 million Package of Dredging Bills.
- Kill Van Kull Construction Project Commences.
- NJDOT Commissioner Appointed Chair of the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on Water Transportation.
- NJMR and the Port Authority of New York and New Jersey Conduct East/West Trade Conference, PA Signs Co-op Agreement with Suez Canal.
- NJMR and Sea Grant Conduct Manasquan Harbor Management Seminar.
- Port of New York & New Jersey Conducts Y2K Drill, Nothing Crashes.
- Sea-Land/Maers k Merger/Acquisition Announced.
- SeaLand/Maersk Negotiations Completed.
- NJMR plans, organizes, and participates in numerous educational programs including The 1999
   National Dredging Conference, the 1999 Western Dredging Association Conference, the International Environmental Expo-1999, International Navigation Congress Conference, and the Society of American Military Engineers Seminar.

"We must keep our ports the most efficient on the East Coast. We must continue to dredge to keep our ports up to changing industry standards."

-Governor Christine Todd W hitma n Mond ay, July 19, 1999



GovernorChristine Todd W hitman attheBillSigning

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The Regina Maersk (pictuse compliments of the PortAuthority of New York and New Jessey)

"The barbaric practice of ocean dumping was state-of-the-art in 1902, but in New Jersey, we're meeting the 21st century with new technologies that move us forward, protect the environment and create jobs."

Cindy Zipf Executive Director Clean Ocean Action

> Press Conference November 9, 1999

#### The PortofN ew York and N ew Jersey

From the completion of the Harbor Navigation Study to the allocation of funding for channel deepening, the Port of New York and New Jersey has had a dynamic year. The Port of New York and New Jersey continues to account for thirty-four percent of the United States' total trade, moving over two million twenty-foot equivalent containers (TEUs) to over 15 million customers. Trade is estimated to increase from 44 million tons to 163 million tons by the year 2040. Containerized trade is expected to increase to 11.8 million TEUs by 2040 and non-containerized cargo will more than double.

#### Studies

The *Arthur Kill 45' Study* was initiated to evaluate the economic viability of deepening the channel to 45 feet mlw. New Jersey agreed in 1999 to provide funding, if necessary, to the local sponsor (the Port Authority of New York and New Jersey) to complete this study.

In 1998, at the request of the State, the US Army Corps of Engineers (USACE) commenced a reconnaissance for deepening of the Arthur Kill south of Morse's Creek (the *Arthur Kill Extension Study*). The extension study has been completed and it appears that the Corps will not recommend deepening of this section of the Arthur Kill.

The *Harbor Navigation Study*, conducted by the USACE and sponsored by NJMR, the Port Authority, and the State of New York, was completed in December of 1999. Recommendations will be published in January of 2000. Preliminarily the report recommends 50' depths for the Ambrose and Anchorage Channel, Arthur Kill Channel, Bay Ridge Channel, Kill Van Kull Channel, and Port Jersey Channel.

In 1999, The Port Authority of New York and New Jersey, with the assistance of the States of New York and New Jersey, completed the *Port Development and Investment Planning Report*. The report recommends \$5 to \$7 billion in new investment, including terminal expansion, new and expanded highways, rail lines and \$1 billion in dredging and deepening projects. Building new facilities in the Port region will create 233,000 new jobs and an additional \$30 billion a year in economic activity in the Port.

**Red Hook Anchorage** is a series of anchorages for barges, petroleum tankers and cargo vessels where vessels bound to and from New Jersey load/offload, await sailing orders or berths, and otherwise stop over in transit. The State of New Jersey, the State of New York, and the Port Authority of New York and New Jersey have entered into an agreement with the USACE to conduct a feasibility study for the deepening of this facility.

#### **Proiects**

The *Arthur Kill 41'/40' Deepening* project involves dredging the existing -35 feet channel to -41 feet mlw from the confluence with the Kill Van Kull to the marine terminal at Howland Hook on Staten Island. The project also includes deepening to -40 feet mlw from Howland Hook to PetroPort. With the assistance of NJMR, the project was reauthorized in the Water Resources Development Act (WRDA) of 1999.

NJMR participated, with the New Jersey Department of Environmental Protection (NJDEP), in the development the draft Implementation Plan for the New York District's *Dredged Material Management Plan* (DMMP). The plan, approved in December of 1999, represents regional commitment to the beneficial use of all dredged materials and the virtual elimination of in-water disposal.

NJMR has initiated planning and discussions for a *Harbor Development and Restoration Plan* with USACE, NJDEP, the Port Authority of New York and New Jersey and others for the purpose of creating a comprehensive approach to harbor development, restoration of damaged natural resources, remediation and pollution prevention. In concert with this proposal, NJMR has advanced an environmental

dredging project for the severely contaminated reaches of the *Passaic River*. The Passaic River is a major source of contaminated sediments transported to Newark Bay and environs. Removal or restoration of these contaminated sediments are estimated in the DMMP to save up to \$1 billion in the navigational dredging program.

Due to the SeaLand/Maersk negotiations, Governor Christine Todd Whitman stepped up to the funding challenge for the *Kill Van Kull Deepening* project. This Federal project was authorized by Congress in 1985 and the first phase of construction to -40 feet mlw was completed in 1995. The Kill Van Kull serves the busiest and largest container facilities in the Port of New York and New Jersey at Port Newark, ElizabethPort and Howland Hook. The State of New Jersey committed \$101.3 million to the Port Authority of New York and New Jersey for the local share of this \$700+ million Federal project.

Twenty-seven million dollars was appropriated for the deepening of the *Port Jersey Channel* to -41 feet mlw. NJMR is the local sponsor. The State recently dredged the channel to -38 feet mlw. The US Army is preparing to tum over the Military Ocean Terminal (MOTBY) to the City of Bayonne in 2001. NJMR and the private sector is working with the City to develop a minimum of 160 acres of the terminal as part of the *Port Jersey Marine Complex*.

## The Ports A bng the Delaware River and Bay

Delaware River ports continued their role in 1999 as a leader in petroleum, fruit, wood products, steel, paper, cocoa, and scrap metal. The Delaware River is the fourth busiest port on the East Coast, and is the second largest petroleum center in the country. The New Jersey maritime community along the Delaware is projected to experience continued growth in 2000.

In order to maintain this economic growth and port ranking, the Delaware River Port Authority (DRPA) and the USACE will execute a deepening project on the Delaware River that will increase the channel depth to -45 feet mlw. It is estimated that during the construction phase of this project, 1,600 new jobs will be created resulting in \$204 million in wages and \$16 million in State tax revenue. A 45 foot channel will allow larger more efficient ships with the ability to carry more products to enter the Ports along the Delaware River. This will ultimately reduce the cost of goods to the consumer. In addition to the economic benefits, environmental benefits will result from decreased lightering operations of petroleum in Delaware Bay.

The States of New Jersey (\$13 million), Pennsylvania (\$15 million), and Delaware (\$7 million) with DRPA (up to \$100 million) have committed funding towards the total project cost of \$311 million. The US Army Corps of Engineers will provide the remaining funds. Congress provided \$1.5 million in fiscal year 1999 to finalize the plans and specifications and initiate construction. Legislation to appropriate New Jersey's share of the project is pending approval. Meanwhile, NJMR, NJDEP, and DRPA have developed a Public Information Program to disseminate necessary information and alleviate public concerns regarding the deepening project.

Clean dredged material, removed from Delaware River maintenance dredging and this deepening project, has many beneficial uses. Clean sand removed from the Delaware Bay will be utilized for shore protection and wetlands restoration. Dredged material located in confined disposal facilities (CDFs) upland will be used as construction fill. For example, NJMR, NJDEP, Burlington County and the Burlington County Bridge Commission have undertaken a unique effort at the *Palmyra Cove Nature Park*. Palmyra is a historic CDF which has been selected to demonstrate the utilization of dredged materials for construction projects and landfill operations. While the site will continue to be utilized as a CDF and as the source of dewatered dredged material for beneficial use, the project will also preserve open space, provide educational and recreational opportunities for the public, and protect existing flora and fauna. When development is complete, the park will include hiking trails, observation sites, and an environmental education center.

Every bod y knows waterborne cargo is the cheapest, safest, most efficient and en viron mentally sensitive way to mo ve goods. Just think what would happen to our roads and air quality if we had to move cargo on land."

Michael J. Linton
Former President,
Pilots Association for the
Bay and River Delaware

Courier Post

A River's Rebirth

A Series in 1999



Delaware River Portof Philadelphia & Camden

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AirGuard Demonstration Project

#### Dredging ProjectFacilitation Task Force

The Dredging Project Facilitation Task Force (DPFTF) approved several projects vital to the State's commercial navigation channels. The DPFTF, which is administered by this Office, was created by the 1996 Port Revitalization Act. Projects recommended to the Legislature this past year include the Sediment Decontamination Demonstration RFP project, the Pennsylvania Mines Reclamation Project, the local share of the Delaware River Deepening project, the local share for the Port Jersey Channel Deepening project, and a contribution of the local share of the Kill Van Kull Deepening project.

The Delaware River recommendation has been passed by the Senate and is currently pending in the Assembly. On September 15, 1999, Governor Christine Todd Whitman signed the legislation for the remaining projects. With this action, the \$205 million in funds provided by the Port Revitalization Act of 1996 has been fully allocated and/or appropriated.

#### Projects Approved by the DPFTF

Delaware River Channel Deepening Project (\$13 million)

Kill Van Kull Deepening Project (\$101.3 million)

Pennsylvania Mines Reclamation Project (\$10 million)

Port Jersey Channel Deepening Project (\$27 million)

### Innovative Technology, Research & Development

NJMR is sponsoring the *AirGuard® Demonstration* of innovative pneumatic sedimentation barrier technology at the IMTT facility in Bayonne. Sedimentation and fish surveys have been conducted every other month since installation and to date the project appears to be highly successful. Phase II of the project will determine whether the technology will reduce sedimentation in high-energy environments.

NJMR is sponsoring an *Air Quality Monitoring Project* to evaluate air emissions from dredged materials handling facilities. The project is managed by the New Jersey Marine Sciences Consortium and will last approximately 18 months.

NJMR is sponsoring the deepening of the State-maintained *Claremont Channel* in partnership with Hugo Neu Schnitzer East (HNSE). The approximately 1.25 million cubic yards of sediment from this project will be utilized in several technology demonstrations which are expected to develop new uses for other recyclable materials, reclamation of abandoned mines, and brownfield closure.

NJMR and River Terminals Development Company are collaborating on a *Habitat Development and Improvement Project* which will utilize various types of dredged materials in the creation of new habitat, shoreline stabilization and restoration of areas severely impacted by past industrial activity.

NJMR is sponsoring a project to demonstrate the utilization of red clay, contaminated dredged material and dredged material of various technical properties in *Landfill Operations* and other beneficial uses. For example, the Hackensack Meadowlands Development Commission (HMDC) has identified 11 landfills which leach as much as 400,000 gallons per acre per year of contaminated liquid into the Newark Bay complex. One project would demonstrate the use of day as an impermeable cap over the landfills. Other projects in Burlington and Ocean Counties would demonstrate the use of dredged material with admixtures for daily and intermediate cover.

NJMR continues to fund and participate in the *New Jersey Toxics Workplan*. In addition, NJMR and NJDEP are collaborating with the Hudson River Foundation (HRF) to issue *Request for Proposals for Contaminant Fate and Transport Modeling* and a *Quality Assurance* contract for the Modeling program.

NJMR is sponsoring the continuation of the *Pennsylvania Mines Demonstration Project* at Bark Camp, Pennsylvania by funding the transport and processing of approximately 200,000 cubic yards of dredged material from Port Authority Reaches B, C, and D.

Workplan negotiations with the five vendors for the Sediment Decontamination Demonstration Proj-



Pennsylvania Mines Reclamation Project

**Project** commenced in June of 1999. Draft workplans are nearing completion. One vendor, the WEB Consortium conducted a pilot test of their technology this spring utilizing approximately 700 cubic yards of contaminated dredged materials from a site in Newark. An additional 2,500 cubic yards has been dredged from the same site and is reserved for use by the remaining vendors. These projects are expected to commence in January of 2000.

NJMR is sponsoring and funding a technology demonstration of the utilization of processed contaminated dredged material in *Transportation Projects*. Approximately 83,000 cubic yards of sediment was processed and placed at in an industrial area in 1998. This year, two model embankments were constructed with the material utilizing mixtures designed by the Sediment and Dredged Materials Technology Institute. Highly specialized equipment was designed and installed to monitor settling Final reports on the project are due early 2000.



The RV Newark Bayand RV Passaic River Press Eventon July 14, 1999

## Special Projects

NJMR is a sponsor and participant in the development of *Container Portway* (aka Northern New Jersey International Intermodal Freight Corridor Project) which is designed to provide a dedicated roadway for cargo movement between Port terminal facilities, intermodal rail connections, and major highways. This is a \$500 million project being managed by the NJ Department of Transportation. The North Jersey Transportation Planning Authority has been granted funds for a related brownfields reclamation study and NJMR is sponsoring a related economic analysis and incentives study.

In 1999 a new dredged *Materials Handling Facility (MHF)* was established at Claremont Channel. The facility will off-load and process up to 1.25 million cubic yards per year for transportation to brownfield sites and the Pennsylvania ,mines.

**Minish Park** is a Passaic River development project sponsored by NJDEP, United States Environmental Protection Agency (USEPA) and USACE. Groundbreaking was conducted in November and an NJMR technology vendor will decontaminate material which will be dredged from the Passaic River as part of the development.

**Nation's Port** is a bi-state coalition of business, labor and community leaders which supports strategic investments in the Port of New York and New Jersey. Created in 1998, 1999 saw the appointment of Douglas L. Kennedy, President & CEO, Fleet Bank New Jersey as Chairman by Governor Whitman. The Coalition followed its early success in securing funds for the Kill Van Kull project by mounting a campaign in support of Fiscal Year 2001 funding and passage of WRDA 2000.

**NJDIG** (New Jersey Dredging Inter-agency Management Group) is an innovative approach to the management of dredged material from non-State projects. The objective is to ensure a steady stream of dredged material for upland beneficial use projects such as brownfields reclamation, landfill operations, transportation and demonstration projects. A draft *Maintenance and Operations Manual* was completed in 1999 and a Memorandum of Understanding between USACE, the Port Authority of New York and New Jersey and the State is currently under review.

NJMR and the US Coast Guard (USCG), among others conducted a series of drills designed to test **Y2K Readiness** on September 15, 1999. Three simulations included vessel equipment failure, oil spill response, and communications failures which would result in manual vessel traffic management. A national and international audience, hosted by USCG Headquarters witnessed a successful demonstra-

"NewJersey's efforts to develop alternatives to ocean disposal have been instru mental in identifying disposal options for the Harbor's dred ged material. Working to have . . . other stak eholders follo w New Jersey's lea dership... we can achieve our goal of protecting the marine environment as well as our nation's commerce."

J. Charles Fox Assistant Administrator USEPA

In a lett er dated Deæmber 23, 1999 to Governor Christine Todd Whitman

## New Jersey Maritim e Resources Staff

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## Mission Statement

New Jersey Maritime Resources (NJMR) was created by Governor Christine Tood Whitman in August of 1995. NJMR provides interagency support, programmatic planning and policy recommendations; promotes coordination and cooperation with and among State, multi-State, Federal and non-governmental agencies; engages in public education on maritime issues; serves as the primary advisory body and lead agency for support of New Jersey's \$50 billion maritime industry which includes ports and terminals, boat manufacturing, ferry operations, marine trades, commercial and recreational fishing, military operations, and government services; conducts technology research and development; and, investigates innovative dredged material management technologies to ensure continued development and growth of New Jersey's Marine Transportation System.

New Jersey's Marine Transportation System (MTS) encompasses navigable channels, berris, terminals and related intermodal transportation infrastructure, facilities and equipment, sediment and dredged material management programs, shipping, receiving, cargo-movement and tracking, aides to navigation, intelligent and vessel traffic information system, and such related activities which promote the efficient operation, environmental integrity, and economic development of New Jersey's Maritime Industry. The MTS provides economic value, national security support, environmental protection and recreational opportunity for the State, the region, and the nation.

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